

ABSTRACT

The ATP amplification method of the present invention is a method for amplifying and detecting a very trace amount of exogenous 5 ATP by allowing a fusion protein (PPK-ADK) of a polyphosphate kinase and an adenylate kinase, the fusion protein not containing ADP, to act on a mixture of ATP, AMP, and a polyphosphate compound. The present invention also provides an ultrasensitive ATP amplification method by which ATP at a single cell level can be amplified and detected, and an 10 ultrasensitive microbial assay based on this ATP amplification method.